

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte CURTIS C. SHOUP

Appeal No. 2002-1081  
Application 09/325,311

ON BRIEF

MAILED

OCT 31 2002

PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

Before STAAB, McQUADE, and BAHR, Administrative Patent Judges.  
McQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Curtis C. Shoup originally took this appeal from the final rejection (Paper No. 6) of claims 1 through 17, all of the claims pending in the application. Upon consideration of the appellant's main brief (Paper No. 11), the examiner issued an office action (Paper No. 12) in which prosecution was reopened, new superseding rejections of claims 1, 2, 4 through 7 and 11

through 17 were made and claims 3 and 8 through 10 were allowed.<sup>1</sup> In response, the appellants filed a request that the appeal be reinstated (Paper No. 13) and a supplemental brief (Paper No. 14). Granting the request, the examiner entered an answer (Paper No. 15) and forwarded the application to this Board for review of the new rejections of claims 1, 2, 4 through 7 and 11 through 17.

### THE INVENTION

The subject matter on appeal pertains to "a method of manufacturing a security door" (specification, page 1).

Representative claims 1, 7 and 13 read as follows:

1. In a method of fabricating a metal security door having a frame formed with a pair of hollow, upright stile members, upper and lower hollow transverse rail members extending between said stile members, and security bars extending between at least some of said stile and rail members, the improvement comprising spot welding said security bars to said at least some of said stile and rail members.

7. A method of fabricating a metal security door comprising:  
forming four hollow metal door perimeter segment members so as to define a plurality of security bar receiving openings in each of said perimeter segment members,

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<sup>1</sup>As claims 3 and 8 through 10 are dependent claims, they should have been objected to as depending from rejected base claims.

positioning a plurality of metal security bars to project through said security bar receiving openings and into said perimeter segment members so that said ends of said metal security bars terminate within said perimeter segment members and positioning said perimeter segment members together to form a rectangle, and

spot welding said ends of said metal security bars to said perimeter segment members within which they terminate.

13. A method of fabricating a security door comprising:

forming a metal door frame to define a pair of hollow upright stile frame members and upper and lower hollow transverse rail frame members so that each of said frame members has an inner face with an attachment flange projecting therefrom and forming security bar receiving apertures in all of said frame members so that said security bar receiving apertures are located in said inner faces of said frame members,

assembling a plurality of metal security bars with said hollow frame members so that the ends of said security bars project through said security bar receiving apertures and into said hollow frame members and so that said security bars pass over and reside in contact with said attachment flanges, and

spot welding said security bars to said attachment flanges so as to permanently secure said security bars to said metal door frame.

#### THE PRIOR ART

The items relied on by the examiner as evidence of obviousness are:

O'Brien	2,197,982	Apr. 23, 1940
Medley	3,892,939	Jul. 1, 1975
Stern	5,018,263	May 28, 1991
Janotik et al. (Janotik)	5,549,352	Aug. 27, 1996

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The prior art described on pages 1 through 3 of the  
appellant's specification (the admitted prior art)

#### THE REJECTIONS

Claims 1, 2, 7 and 13 stand rejected under 35 U.S.C.  
§ 103(a) as being unpatentable over the admitted prior art in  
view of Medley and O'Brien.

Claims 4, 5, 11, 14 and 15 stand rejected under 35 U.S.C.  
§ 103(a) as being unpatentable over the admitted prior art in  
view of Medley, O'Brien and Stern.

Claims 6, 12, 16 and 17 stand rejected under 35 U.S.C.  
§ 103(a) as being unpatentable over the admitted prior art in  
view of Medley, O'Brien, Stern and Janotik.

Attention is directed to the appellant's main and  
supplemental briefs (Paper Nos. 11 and 14) and to the examiner's  
last office action and answer (Paper Nos. 12 and 15) for the  
respective positions of the appellant and the examiner with  
regard to the merits of these rejections.

DISCUSSION

I. The appellant's non-analogous art argument

The threshold issue in the appeal is whether Medley and O'Brien, applied in support of each of the examiner's rejections, are non-analogous art as urged by the appellant. In an obviousness determination under 35 U.S.C. § 103(a), art which is non-analogous is too remote to be treated as prior art. In re Clay, 966 F.2d 656, 658-59, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

Medley discloses "a resistance [i.e., spot] welding machine which is useful for welding an end bar to the ends of the longitudinal members of a metal grating" (Abstract). Of particular interest is Medley's motivation for using spot welding:

[i]n many instances it is necessary to weld end bars to the ends of longitudinal members of metal gratings, and heretofore it has been carried out with steel grating by the arc welding process. This process is slow and is not very suitable for use with aluminum. There is therefore a dual reason to provide a machine which is

capable of welding either steel or aluminum, and which is capable of welding at a relatively high speed so that it is suitable for use in a production line [column 1, lines 12 through 20].

O'Brien discloses a shelf or rack of the type used in refrigerators and ovens. The rack consists of wire grid members 9 and a peripheral frame composed of a front member 1, two side members 2 and a rear member 3. The front member 1 can take the form of a T angle iron having a central flange 5 (Figure 5), sheet metal rolled into a T section having a pair of flanges 14 (Figure 6), or sheet metal rolled into a T section having a single flange 18 (Figure 7). In each embodiment, the wire grid members 9 are secured to the frame front member by welding to the flange(s).

There are two criteria for determining whether a reference is analogous: (1) whether the reference is from the field of the inventor's endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether it is reasonably pertinent to the particular problem with which the inventor was involved. Id.

The specification in the instant application indicates that the field of the appellant's endeavor is the manufacture of security doors (see page 1) and that the particular problem facing the appellant was to provide a system for fabricating such a door without the need for the skill and/or expense involved in attaching security bars into a surrounding frame by arc welding (see page 3). Although Medley and O'Brien are not from this field of endeavor, they are certainly reasonably pertinent to this particular problem. Thus, both references constitute analogous art which was properly considered by the examiner in evaluating the obviousness of the appellant's invention.

II. The 35 U.S.C. § 103(a) rejection of claims 1, 2, 7 and 13

The following passage from the appellant's specification lays out the scope of the admitted prior art:

Conventional security doors are formed of rectangular frames of heavy metal tubing, often drawn and rolled steel having a thickness of about 0.090 inches. The steel tubing is formed to create upright stile members and upper and lower transverse rail members extending between the stile members. To create security, a grid of metal bars is provided across the rectangular opening defined between the stile and rail members. Some of these metal bars extend parallel to the stiles and are anchored to the transverse rail members at the top and bottom of the door. Other metal security bars

are oriented perpendicular to the door stiles and are secured thereto.

In some cases additional decorative and angular metal bars are provided as an adjunct to the rectilinear grid that functions to provide the door with a high level of security. Quite often a security door is also provided with a screen mesh to exclude insects and rodents. It is the metal grillwork, however, which provides security from unauthorized entry and which affords protection against burglary and home invasions. Security doors are mounted in gate openings or in buildings in surrounding metal frames that are firmly secured in the doorway to be protected.

The conventional fabrication of security doors is both expensive and time consuming. Specifically, the metal security bars forming the rectilinear grillwork are at present secured to the elements or segments of the surrounding rectangular frame forming the door by means of arc welding [specification, page 2].

The foregoing security door fabricating method meets all of the limitations in independent claim 1 except for the one requiring the security bars to be welded to at least some of the stile and rail members by "spot welding." The examiner's conclusion (see page 3 in Paper No. 12) that Medley would have suggested replacing the admitted prior art arc welding technique for attaching the security bars to the stile/rail members with a spot welding procedure, thereby arriving at the subject matter recited in claim 1, is well founded. Notwithstanding the appellant's argument to the contrary, Medley's teaching that spot



welding can be performed at a higher speed than arc welding, with its implication of superior efficiency, would have provided ample motivation or suggestion for the substitution proposed by the examiner. The appellant's related argument that Medley's spot welding machine could not successfully weld the admitted prior art security bars to their hollow stile/rail members is also unconvincing. To begin with, the appellant has not advanced any objective evidence to support this contention. Mere argument is not sufficient in this regard. See In re De Blauwe, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984). Moreover, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Even if it is assumed for the sake of argument that Medley's spot welding machine could not be used in conjunction with the

admitted prior art, Medley's description of the speed advantage afforded by spot welding as compared to arc welding would have suggested the use of a suitable spot welding machine to carry out the process.

Thus, the combined teachings of the admitted prior art and Medley justify the examiner's conclusion that the differences between the subject matter recited in claim 1 and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. We shall therefore sustain the standing 35 U.S.C. § 103(a) rejection of claim 1 as being unpatentable over the admitted prior art in view of Medley and O'Brien, with the application of O'Brien here being superfluous.

We shall not sustain, however, the standing 35 U.S.C. § 103(a) rejection of claims 2, 7 and 13 as being unpatentable over the admitted prior art in view of Medley and O'Brien.

As conceded by the examiner (see page 3 in Paper No. 12), the admitted prior art does not respond to the limitation in claim 2 (which depends from claim 1) requiring the step of

forming the stile and rail members with flat inwardly directed attachment flanges wherein the security bars are spot welded to the flanges, the limitations in independent claim 7 requiring the steps of forming the four hollow metal door perimeter segment members so as to define a plurality of security bar receiving openings and positioning the security bars to project therethrough, and the comparable attachment flange and security bar receiving aperture limitations in independent claim 13. The examiner deals with these shortcomings by concluding that it would have been obvious "to have included a plurality of openings and flanges on the [admitted prior art] stile and rail members, in a similar manner as taught in O'Brien, in order to promote a better bonding between members" (Paper No. 12, page 4). There is nothing in O'Brien's method of producing a refrigerator/oven rack, however, which would have suggested modifying the admitted prior art security door fabricating method in this manner. Given the substantial differences in the construction and function of security doors and refrigerator/oven racks, it is apparent that the only suggestion for combining these prior art items in the manner proposed by the examiner stems from hindsight knowledge

impermissibly derived from the appellant's disclosure. The use of such hindsight knowledge to support a conclusion of obviousness under § 103(a) is, of course, impermissible. See W.L. Gore & Assocs. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

III. The 35 U.S.C. § 103(a) rejections of claims 4 through 6, 11, 12 and 14 through 17

Since Stern and/or Janotik do not cure the foregoing deficiencies in the admitted prior art, Medley and O'Brien combination with respect to the subject matter recited in parent claims 2, 7 and 13, we shall not sustain the standing 35 U.S.C. § 103(a) rejection of dependent claims 4, 5, 11, 14 and 15 as being unpatentable over the admitted prior art in view of Medley, O'Brien and Stern, or the standing 35 U.S.C. § 103(a) rejection of dependent claims 6, 12, 16 and 17 as being unpatentable over the admitted prior art in view of Medley, O'Brien, Stern and Janotik.

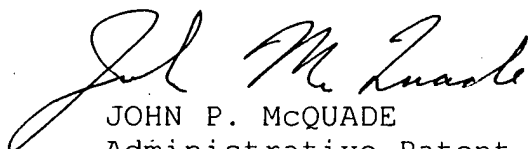
SUMMARY

The decision of the examiner to reject claims 1, 2, 4 through 7 and 11 through 17 is affirmed with respect to claim 1 and reversed with respect to claims 2, 4 through 7 and 11 through 17.

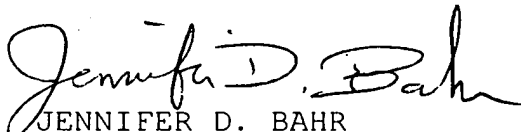
AFFIRMED-IN-PART



LAWRENCE J. STAAB  
Administrative Patent Judge



JOHN P. McQUADE  
Administrative Patent Judge



JENNIFER D. BAHR  
Administrative Patent Judge

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